REMARKS

Claims 1 and 3-27 are pending in the application and stand rejected.

Claim Rejections Under 35 U.S.C. § 102

Claims 1, 3-6, 8-18, 20-25 and 27 stand rejected under 35 U.S.C. § 102(e) as being anticipated by U.S. Patent No. 6,519,686 to Woodring. Applicants respectfully disagree with Examiner's characterizations of Woodring as applied to the claimed inventions and respectfully contend that at the very minimum, claims 1, 16 and 23 are patentably distinct and patentable over Woodring.

In particular, Applicants contend that Woodring does not disclose or suggest a scheduler that manages the storage and consumption of data in a queue, where managing comprises *controlling the data source and the plurality of consumers to control the amount of data stored in and consumed from the first queue*, as essentially claimed in claims 1, 16 and 23.

Although Woodring discloses in Fig. 3 and 4, for example, an IPC channel system (330) comprising a storage manager (350) for managing data that is stored in a buffer storage area (372), Examiner has not explained how the storage manager (350) manages by *controlling the data source and the plurality of consumers to control the amount of data stored in and consumed from the first queue.*

In the Response to Arguments (page 2 of the Final Office Action), Examiner contends that the producer (310) (data source) is *"controlled"* by an FBSEM mechanism (376) of the storage manager (350), which is used to signal to the producer that one or more buffers in the buffer storage (372) are free and available for further use (Col. 7, lines 61-65). Applicants respectfully disagree with Examiner's characterizations. Indeed, Examiner has not explained

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how the FBSEM mechanism (376) actually *"controls the data source .. to control the amount of data stored in a queue"* as essentially claimed. The FBSEM (376) is merely a notification mechanism that enables the producer to actually determine (via the producer FBSEM mechanism (316), Fig. 4) what buffers (multiple queues) are/are not available. But clearly, the FBSEM mechanism does not *control the data source* to control *the amount of data stored in a queue*.

Furthermore, it is respectfully submitted that Examiner's reliance on the MUTEX mechanism (374) as "controlling the producer" is misplaced. The MUTEX mechanism (314, 374, 324) is nothing more than a mechanism to prevent conflicting accesses to the shared memory by multiple processes, by providing mutually exclusive access by the producer (310) and consumers (320) to the management data structures **with the exception of the buffer storage area** (see, Col. 6, lines 49-51; Col. 7, lines 52-55). Thus, Examiner cannot reasonably contend that the MUTEX mechanism provides a means to *control the data source* to control *the amount of data stored in a queue*. In fact, Examiner argues that the MUTEX "controls the producer by placing a requirement on the producer to acquire exclusive ownership .. before accessing management data for the buffer storage" (see, pages 2-3 of the Final Office Action). However, Examiner does not explain how such MUTEX mechanism operates to *control the data source* to control *the amount of data stored in a queue*, as essentially claimed in claims 1, 16 and 23.

Moreover, in the Response to Arguments, it is respectfully submitted that Examiner has not provided a reasonable basis for the contention that " *the storage manager 350 also includes a variety of mechanisms to control the clients (consumers) as the received data from the buffer storage 372...* (see page 3 of the Final Office). In particular, Examiner has not explained how

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<u>Woodring</u> discloses *controlling the plurality of consumers to control the amount of data consumed from a first queue*, as essentially claimed in claims 1, 16 and 23.

For example, Examiner's reliance on the mail slots 340_0-340_N of the IPC channel (330) is misplaced. These mail slots are not part of, or controlled by the storage manager (350), as is evident from Fig. 4, but rather controlled directly the producer (310). The mail slots are <u>used by the producer</u> (310) to notify the consumers of the arrival of an information stream (see Col. 7, lines 1-5). Examiner points to other "management data structures" in <u>Woodring</u> Col. 7, lines 19-39, but provides no explanation how such structures are used to *control the consumers to control the amount of data consumed from a queue*, as claimed. By way of example, Examiner cites "buffer masks", but buffer masks 364 are nothing more than bit masks that indicate which clients or clients have reference to a given buffer (see Col. 7, lines 47-51). Again, Examiner does not explain how such mechanism controls the consumers, much less how such mechanism controls the consumers to control the amount of data consumed from a queue.
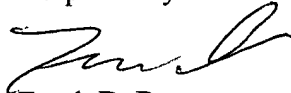
Accordingly, for at least the reasons given above, claims 1, 16 and 23 are patentably distinct and patentable over <u>Woodring</u>. Further, since claims 3-6 and 8-15 depend from claim 1, claims 17-18 and 20-22 depend from claim 16, and claims 24-25 and 27 depend from claim 23, such claims are believed to be patentably distinct and patentable over <u>Woodring</u> *at least* for the reasons given above for respective base claims 1, 16 and 23.

Accordingly, the withdrawal of all the rejections under 35 U.S.C. § 102(e) is respectfully requested.

Claim Rejections Under 35 U.S.C. § 103

Claims 7, 19 and 26 were rejected under 35 U.S.C. § 103(a) as being unpatentable over Woodring in further view of U.S. Patent No. 4,916,658 to Lee. The 103 rejections are based, in part, on the contention that Woodring discloses each of the elements of claims 1, 16 and 23 from which these claims depend. As demonstrated above, however, it is respectfully submitted that Woodring does not teach or suggest the elements of claims 1, 16 and 23. Therefore, the combination is legally deficient to establish a prima facie case of obviousness against 7, 19 and 26 because, at the very minimum, Woodring fails to teach or suggest elements of the base claims 1, 16 and 23. Therefore, the withdrawal of the rejections under 35 U.S.C. § 103(a) is respectfully requested.

Respectfully submitted,

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